

WHAT IS CLAIMED IS:

Sub A1
1. An inkjet printing method comprising providing a liquid inkjet ink which contains a thermally responsive material and applying the liquid inkjet ink onto an inkjet recording element in an imagewise fashion, wherein the inkjet recording element has been heated to a temperature higher than the temperature of the liquid inkjet ink.

2. The method of Claim 1 wherein the inkjet ink has a viscosity of less than about 10 centipoise at 22°C and has a viscosity of more than about 20 centipoise above its gel transition temperature.

3. The method of Claim 1 wherein the inkjet inks has a viscosity of less than about 10 centipoise at 22°C and has a viscosity of more than about 1000 centipoise above its gel transition temperature

4. The method of Claim 1 wherein the thermally responsive material comprises a polyethylene oxide-containing block copolymer.

5. The method of Claim 4 wherein the polyethylene oxide-containing block copolymer is a tri-block copolymer of polyethylene oxide-polypropylene oxide-polyethylene oxide.

6. The method of Claim 1 in which the thermally responsive material is a methyl cellulose polymer.

7. The method of Claim 1 in which the inkjet ink contains about 0.1-40% of the thermally responsive material and about 0.5-10% of a colorant.

8. The method of Claim 7 in which the colorant is a dye.

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9. The method of Claim 7 in which the colorant is a pigment.

10. The method of Claim 1 wherein the inkjet recording element has been heated to a temperature of 35° C or greater.

11. An inkjet printing method with controlled color bleed and drop coalescence comprising;

- a) loading ink ejecting elements of a printer with liquid inkjet ink comprising a thermally responsive material;
- b) loading the printer with an inkjet recording element;
- c) heating the inkjet recording element to a temperature higher than temperature of the inkjet ink in the ink ejecting elements; and
- d) ejecting the liquid inkjet ink from the ink ejecting elements onto the heated inkjet recording element in response to digital data signals.

12. The method of Claim 11 wherein the inkjet ink has a viscosity of less than about 10 centipoise at 20°C and has a viscosity of more than about 20 centipoise above its gel transition temperature.

13. The method of Claim 11 wherein the inkjet ink has a viscosity of less than about 10 centipoise at 20°C and has a viscosity of more than about 1000 centipoise above its gel transition temperature.

14. The method of Claim 11 wherein the thermally responsive material comprises a polyethylene oxide-containing block copolymer.

15. The method of Claim 14 wherein the polyethylene oxide-containing block copolymer is a tri-block copolymer of polyethylene oxide-polypropylene oxide-polyethylene oxide.

16. The method of Claim 11 in which the thermally responsive material is a methyl cellulose polymer.

17. The method of Claim 11 in which the inkjet ink contains about 0.1-40% of said thermally responsive material and about 0.5-10% of a colorant.

18. The method of Claim 17 in which said colorant is a dye.

19. The method of Claim 17 in which said colorant is a pigment.

20. The method of Claim 11 wherein the inkjet recording element has been heated to a temperature of 35°C or greater.

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